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(54) **MULTILAYERED POLYMERIC FILM FOR
HOT MELT ADHESIVE LABELING AND
LABEL STOCK AND LABEL THEREOF**

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(58) **Field of Classification Search**

None

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,113,986 A 12/1963 Breslow et al.
3,207,735 A 9/1965 Wijga

(Continued)

FOREIGN PATENT DOCUMENTS

CN 1086488 5/1994
CN 1659030 8/2005

(Continued)

OTHER PUBLICATIONS

Machine Translation of JP 2002370328 A, Dec. 2002.*

(Continued)

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(57) **ABSTRACT**

A polymeric film for labeling articles comprises a core layer (A), a print skin layer (B) comprising a polypropylene homopolymer, a polypropylene copolymer, a high density polyethylene, or a mixture of any of the foregoing polymers and at least 10% by weight based on the weight of the layer (B) of a polyolefin elastomer, an alkene-unsaturated carboxylic acid or acid derivative copolymer, or a mixture of any of the foregoing polymers, and an adhesive skin layer (C) comprising a polypropylene homopolymer, where the polymeric film is oriented. An adhesive containing label stock and an adhesive label die-cut from the adhesive containing label stock comprise the polymeric film which is especially useful for pressure sensitive hot melt adhesive applications.

23 Claims, 1 Drawing Sheet

